

15. (new) The method of Claim 11, wherein the notching can be performed in different angle widths depending on the desired shape in which the trim cap will be formed.

16. (new) The apparatus of Claim 15, wherein one of the notches has an angle of approximately 80 degrees and another of the notches has an angle of 120 degrees.

a' 17. (new) The method of Claim 12, wherein the dimpling can be conducted rapidly to produce multiple dimples on the trim cap material adjacent one another, so that different numbers of dimples at a location indicate different bend directions to be made in forming the desired shape.

III. REMARKS

A. Corrections to Drawings:

As requested in the Office Action, applicants have submitted proposed corrections to the informal drawings originally submitted with this application. These sheets, i.e., 1 through 9 replace the informal drawings previously submitted with this application. Extraneous circles and corner text have been removed. Applicant has also numbered element 60a as requested. (See Fig. 4.) Applicant respectfully submits that the drawings illustrate all of the structural details that are essential for a proper understanding of the invention disclosed in the specification. A full set of formal drawings will be submitted when allowable subject matter is indicated to be present in this application.

B. Summary of Amendments:

Claims 1 through 3, i.e., all of the original claims in the application, have been canceled.

Independent Claim 4 drawn to an apparatus and independent method Claim 12 have been presented to more clearly define applicant's invention. Appropriate dependent claims have also been added.

C. The Subject Matter of the Claims is Not Obvious in view of the Cited Prior Art:

The Office Action indicated that original Claims 1 through 3 were deemed to be "obvious" to one of ordinary skill in the art in light of Berry (i.e., U.S. Patent No. 3,982,457) further in view of Irvello (i.e., U.S. Patent No. 4,819,47). The theory of the rejection is that Berry shows an apparatus with a notcher and a shear and Irvello shows an apparatus with a dimpler. The Office Action asserts that it would have been obvious to combine these teachings to produce applicant's invention.

Applicant's invention relates to the formation of three-dimensional signs comprising various shapes (e.g., letters of the alphabet). The letters are composed of a front, back and sides (i.e., "returns"). Certain of these components are joined together with trim cap material comprising a flat sheet with a thicker, i.e., reinforced, area along one edge. As described in the specification, difficulties have arisen with prior art methods (either automatic or manual) in bending the trim cap to conform to the shape of the letter in a manner that is easy to conduct, yet produces an aesthetically pleasing result without deleterious cracking.

Applicant's invention solves these problems in several ways. First, applicant teaches the notching of the trim cap material along the reinforced area only and not in the body of the trim cap. This significantly reduces cracking of the trim cap when formed into the desired shape and deployed in the sign. In addition, the amount of material removed from the trip cap material varies to facilitate forming of the trim cap into the appropriate shape. The amount of material removed depends on the shape to be formed. Finally, applicant uses dimpling not only to advise where the trim cap material is to be bent or shaped, but also the direction of the bend or shape. Trim cap material notched and dimpled in accordance with the present invention, is easier to bend. A skilled craftsman can easily "read" the dimples to know where and in what direction to bend or form that material into the desired shape. The trim cap material is notched with the size of the notch depending on the bend or shape; the material is notched only in the reinforced area to avoid cracking. These features permit a three-dimensional sign to be produced more easily. They also produce a sign that is more attractive and does not contain cracks which would permit water and other elements to degrade the sign and create an electrical hazard.

The prior art cited in the Office Action does not relate to the formation of three-dimensional signs nor does it relate to the use of trim cap material in the formation of any product.

Berry relates to the forming of heating and air conditioning duct in standard, i.e., square or rectangular, configurations. At best the Berry reference shows the use of multiple notchers that can be deployed so that the flat metal sheet stock can be moved through the machine in a single, i.e., linear, direction. Berry does not address the problem of working with a material, such as trim cap, that is thicker in one portion than in the others. In particular, it does not

address the problem of facilitating the bending of such a material into a wide variety of shapes and methods of doing so that would inhibit cracking. At best, Berry shows that notchers are old. It does not teach or suggest the other features of applicant's invention.

Irvello, also does not deal with three-dimensional signs and does not deal with the manipulation of trim cap material to produce such a product. Irvello relates to the bending of flat aluminum siding. It shows a hand-held dimpling device that can be deployed to produce dimples on both sides of the siding. Irvello does not teach or suggest the use of dimpling to show the nature, i.e., direction, of a bend to be performed at that location. It also does not teach or suggest any of the other features of applicant's invention.

Applicant does not contend that dimplers or notchers are new. However, the prior art does not disclose applicant's invention as claimed and does not render applicant's invention obvious to one of ordinary skill in the art. Neither Berry nor Irvello address the problem of facilitating the bending and use of trim cap material with reinforcing along one edge into a variety of shapes that will be attractive and perform well under conditions of actual use. Neither reference contains any teaching or even a suggestion of the features of applicant's invention. Without such a teaching it is not proper to combine the references to produce the claimed invention.

For these and other reasons, applicant respectfully requests that the rejection of the claims as obvious in view of Berry and Irvello be withdrawn.

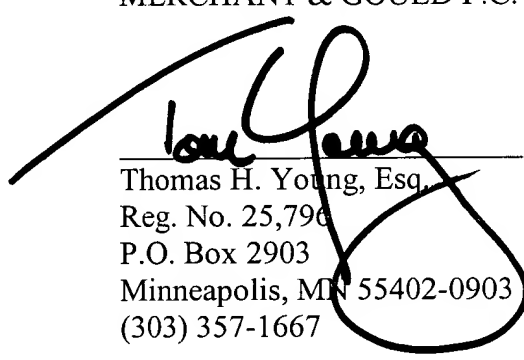
IV. CONCLUSION

Applicant respectfully submits that all Claims pending in this application, i.e. Claims 4 through 17 are in condition for allowance, and such action is respectfully requested.

Applicant respectfully submits that no fee is required in connection with this Response or the amendments set forth herein other than the requested extension of time. However, in the event that this is incorrect, the Patent Office is hereby authorized to charge any appropriate fees or to deposit any excess to Deposit Account No. 13-2725 with respect to Attorney Docket No. 40203.2USU1.

Respectfully submitted this 30th day of January 2004.

MERCHANT & GOULD P.C.



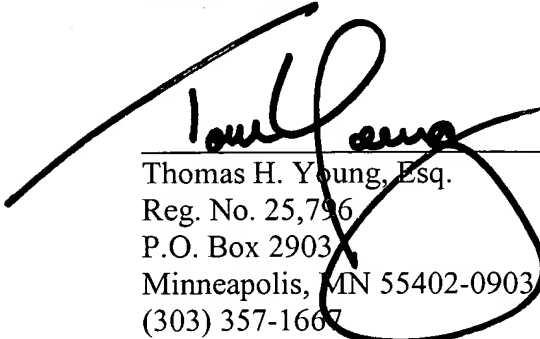
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